

WHAT IS CLAIMED IS:

1. An overwrite method of an optical disc, comprising the step of performing a replacement recording on a data area within the optical disc with overwrite-requested data in a specific recording-completed area within the optical disc in a sequential recording mode (SRM) wherein a logical overwrite is executed to maintain continuity of a user data area by the replacement recording.

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2. The overwrite method of claim 1, wherein if the overwrite in an open SRR area within the optical disc is requested, the replacement recording is executed from NWA within an open SRR.

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3. The overwrite method of claim 1, wherein if the overwrite in a closed SRR area within the optical disc is requested, the replacement recording is executed within a spare area.

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4. The overwrite method of claim 3, wherein if the overwrite in the closed SRR area within the optical disc is requested, the spare area for the replacement recording is an outer spare area (OSA).

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5. The overwrite method of claim 4, wherein the outer spare area (OSA) is allocated on disc initialization.

6. The overwrite method of claim 5, wherein a size  
5 of the outer spare area (OSA) allocated on the disc initialization is  $N \times 256$  clusters where  $N \leq 768$ .

7. The overwrite method of claim 3, wherein if the closed SRR area is located on an inner disc circumference,  
10 the spare area for the replacement recording is an inner spare area (ISA).

8. The overwrite method of claim 7, wherein the closed SRR area located on the inner disc circumference is  
15 an area for recording file system information.

9. The overwrite method of claim 1, wherein after execution of the overwrite, location information of the overwrite-requested area and the replacement-recorded area  
20 is recorded as management information.

10. An overwrite method of an optical disc, comprising the step of performing a replacement recording on a spare area within the optical disc with overwrite-requested data in a specific recording-completed area  
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within the optical disc in a random recording mode (RRM) wherein a size of the spare area for allocation is determined on disc initialization for the replacement recording.

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11. The overwrite method of claim 10, wherein the spare area comprises an inner spare area (ISA) on an inner circumference of the optical disc and an outer spare area (OSA) on an other circumference of the optical disc.

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12. The overwrite method of claim 11, wherein a size of he outer spare area (OSA) allocated on the disc initialization is  $N*256$  clusters where  $N \leq 768$ .

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13. The overwrite method of claim 11, wherein a size of the inner spare area (ISA) allocated on the disc initialization is fixed.

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14. In performing a recording on a write-once optical disc in a recording mode selected from the group consisting of a sequential recording mode (SRM) and a random recording mode (RRM), a write-once optical disc overwriting method comprising the steps of:

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determining a replacement recording area for an overwrite according to the recording mode if the overwrite

on a user data area within the optical disc is requested; and

executing a logical overwrite.

5        15. The overwrite method of claim 14, wherein if the recording mode is the sequential recording mode (SRM), the replacement recording is performed on NWA within the user data area or a spare area.

10        16. The overwrite method of claim 14, wherein if the recording mode is the random recording mode (RRM), the replacement recording is performed on a spare area.

15        17. A recording/reproducing apparatus for a write-once optical disc, comprising:

a control unit delivering a recording command requesting a recording execution on a specific area; and

20        a recording/reproducing unit deciding whether the specific area is a recording-completed area or a non-recorded area, the recording/reproducing unit performing a replacement recording on another area within a data area if the specific area is the recording-completed area, the recording/reproducing unit executing the replacement recording by differentiating the replacement-recorded area  
25 according to a disc recording mode.

